

Translated from the German

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Date of application: April 22, 2000

Date the unexamined 'Offenlegungsschrift', on which no grant has taken place on or before the said date, has been made available to the public by printing or other form: October 25, 2001

Applicant: Norbert Köster

Inventor: the same as the applicant

Title in German of the object of the invention: Vorrichtung Schlauch-Roll-Ventil

HOSE-ROLL-VALVE SYSTEM

Description

Application

Devices for, e.g., blood bag systems.

Use of devices of the heating-element - butt-welding [butt fusion jointing]

method as reversible hose closure devices.

Manufacturing

Hoses, capable of being heat-sealed or welded, having the same wall-thickness and same diameter, are heat sealed with the help of a heat-element butt-welding device, the welding seam not opened.

Description

Hoses can be connected to one another with the help of devices from the heating-element butt fusion jointing in such a way that

1. The joint [spot of connection] remains closed as long as necessary,
2. Or can be opened by rolling the hose between the fingers.

(See drawing)

Prior Art

At present, there are used cut-off valves of hard plastic material. As a result of the sharp, pointed cut-off edges, and as a result of the constriction, there occur undesirably intrusive or spurious shear forces, which damage erythrocytes (red blood cells), and bring about an undesirable hemolysis.

Fig. 1 shows two PVC-hoses (*a + b*), having different diameters. With reference symbol *a* are denoted system-hoses, which are glued into the hose-part *b* of the closed “valve *c*”.

Fig. 2 shows two PVC-hoses (*a + b*), having different diameters. With reference symbol *a* are denoted system-hoses, which are glued into the hose-part *b*

of the open “valve c”.

Patent Claims

Advantages for the user:

The “hose-roll-valves” provide a need-justified, reversible hose closure, and
- after the opening - an unimpeded passage.

Thus, it is possible, after relevant preparatory work, e.g., centrifugation, to transfer - in a very gentle or considerate way - human blood cells, or other biological material from a collecting bag into another system bag. The system remains closed, the contents cannot be contaminated, e.g., by means of air-borne germs.

Technical advantages: Less components.

Explanation to the Drawings

Fig. 3 (=Bild 3)

Einsatzbereiche der “Schlauch-Roll -Systeme” am Beispiel Blutbeutelsystem =
Areas of Application. Example: Blood-bag systems

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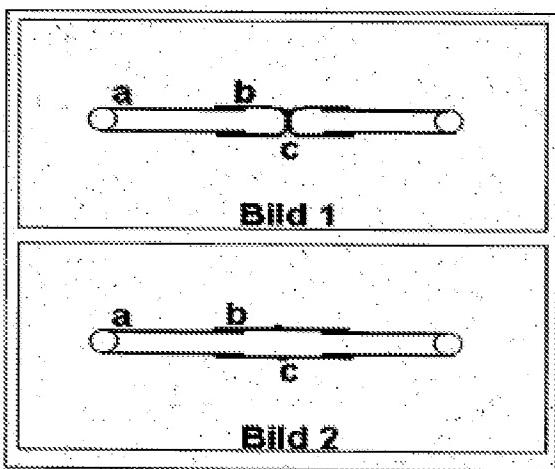
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The USPTO Translator from German & Germanic langgs.

USDoC/USPTO

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Zeichnung



Einsatzbereiche der "Schlauch-Roll-Systeme"
am Beispiel Blutbeutelsystem

Bild 3

